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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,790

03/26/2004

Hooman Honary

42P18416

5212

8791

7590

05/25/2006

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EXAMINER

LI, AIMEE J

ART UNIT

PAPER NUMBER

2183

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/813,790

Applicant(s)

HONARY ET AL.

Examiner

Aimee J. Li

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2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-24 have been considered.

#### *Papers Submitted*

2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Specification, Claims, Drawings, and Oath and Declaration as received on 26 March 2004.

#### *Specification*

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. The abstract of the disclosure is objected to because the Abstract does not contain "that which is new in the art to which the invention pertains" and "an improvement in an old

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apparatus, process, product, or composition.” The current Abstract merely states “Method and apparatus to perform reconfigurable parallel processing are described.” This does not describe “that which is new” nor “an improvement in an old apparatus, process, product, or composition.” Correction is required. See MPEP § 608.01(b).

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being taught by Gove et al., U.S. Patent Number 5,212,777 (herein referred to as Gove).

8. Referring to claim 1, Gove has taught an apparatus, comprising:

- a. A memory unit to store data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);
- b. A plurality of parallel data paths to process said data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line

60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);

c. A plurality of control units to control said data paths (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and

d. A switch to connect said control units to said data paths, said switch to receive configuration information to establish a first set of connections between said control units and said data paths to execute a first process, and a second set of connections between said control units and said data paths to execute a second process (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

9. Referring to claim 2, Gove has taught the apparatus of claim 1, wherein each control unit controls execution of a single program instruction (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

10. Referring to claim 3, Gove has taught the apparatus of claim 2, wherein said first set of connections connects said control units and said data paths in a first configuration to perform

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single instruction multiple data processing (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

11. Referring to claim 4, Gove has taught the apparatus of claim 2, wherein said first set of connections connect at least one of said plurality of control units to multiple data paths, with said one control unit to control said multiple data paths (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

12. Referring to claim 5, Gove has taught the apparatus of claim 4, wherein each data path performs a same set of operations using said data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

13. Referring to claim 6, Gove has taught the apparatus of claim 2, wherein said second set of connections connects said control units to said data paths in a second configuration to perform multiple instruction multiple data processing (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

14. Referring to claim 7, Gove has taught the apparatus of claim 2, wherein said second set of connections connect multiple control units to multiple data paths, with each control unit to control a single data path (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

15. Referring to claim 8, Gove has taught the apparatus of claim 4, wherein each data path performs a different set of operations using said data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

16. Referring to claim 9, Gove has taught the apparatus of claim 1, further comprising a configuration module to configure said switch to establish said connections in accordance with said configuration information (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

17. Referring to claim 10, Gove has taught a system, comprising:

- a. An antenna (Gove column 5, lines 49-56; column 28, lines 63-64; column 66, lines 3-8; and Figure 48). In regards to Gove, antennas send and receive signals for devices, such as televisions and remote cameras (Please see [www.dictionary.com](http://www.dictionary.com) "antenna" ©2000).

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- b. A host processing system (Gove column 2, line 66 to column 3, line 4; column 5, lines 20-34; column 6, lines 23-36; column 12, line 63 to column 13, line 9; Figure 11 Figure 2; Figure 4; Figure 17; and Figure 29);
  - c. A configuration module to store configuration information (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and
  - d. A reconfigurable communication architecture module to receive said configuration information, said reconfigurable communication architecture module to configure itself to perform single instruction multiple data processing in a first configuration to execute a first process, and to perform multiple instruction multiple data processing in a second configuration to execute a second process (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).
18. Referring to claim 11, Gove has taught the system of claim 10, wherein said reconfiguration communication architecture module comprises:
- a. A plurality of processing elements to execute functions for each process (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines



6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);

- b. A plurality of routing elements to connect said processing elements (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and
- c. A plurality of communications mediums to connects said processing elements and said routing elements in a mesh topology (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62). In regards to Gove, a “mesh topology” is where multiple nodes are connected together with multiple connections (Please see [www.its.bldrdoc.gov](http://www.its.bldrdoc.gov) “mesh topology” ©1996), which is shown in Gove’s Figures 4 and 17.

19. Referring to claim 12, Gove has taught the system of claim 10, wherein one of said processing elements comprises:

- a. A memory unit to store data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62,

line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);

- b. A plurality of parallel data paths to process said data (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);
- c. A plurality of control units to control said data paths (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and
- d. A switch to connect said control units to said data paths, said switch to receive said configuration information to establish a first set of connections between said control units and said data paths to execute said first process, and a second set of connections between said control units and said data paths to execute said second process (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

20. Referring to claim 13, Gove has taught the system of claim 12, wherein each control unit controls execution of a single program instruction (Gove column 1, line 47 to column 3, line 20;

column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

21. Referring to claim 14, Gove has taught the system of claim 13, wherein said first set of connections connect at least one of said plurality of control units to multiple data paths, with said one control unit to control said multiple data paths (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

22. Referring to claim 15, Gove has taught the system of claim 13, wherein said second set of connections connect multiple control units to multiple data paths, with each control unit to control a single data path (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

23. Referring to claim 16, Gove has taught a method, comprising:

- a. Receiving configuration information at a switch (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and

- b. Configuring said switch to establish a first set of connections between a plurality of control units and a plurality of data paths to execute a first process using single instruction multiple data processing (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62); and
- c. Configuring said switch to establish a second set of connections between said control units and said data paths to execute a second process using multiple instruction multiple data processing (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

24. Referring to claim 17, Gove has taught the method of claim 16, wherein each control unit controls execution of a single program instruction (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

25. Referring to claim 18, Gove has taught the method of claim 17, wherein said first set of connections connect at least one of said plurality of control units to multiple data paths, with said one control unit to control said multiple data paths (Gove column 1, line 47 to column 3, line 20;

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column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

26. Referring to claim 19, Gove has taught the method of claim 17, wherein said second set of connections connect multiple control units to multiple data paths, with each control unit to control a single data path (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

27. Referring to claim 20, Gove has taught the method of claim 16, further comprising:

- a. Receiving a first set of data (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62)
- b. Storing said first set of data in a memory unit (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62); and
- c. Processing said first set of data with said data paths using said first set of connections (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to

column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62).

28. Referring to claim 21, Gove has taught the method of claim 16, further comprising:
- a. Receiving a second set of data (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62);
  - b. Storing said second set of data in a memory unit (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62); and
  - c. Processing said second set of data with said data paths using said second set of connections (Gove column 8, line 42 to column 9, line 13; column 10, lines 5-8, 22-29, and 38-44; column 10, line 65 to column 11, line 30; column 61, line 60 to column 62, line 24; Figure 12; Figure 13; Figure 14; Figure 15; Figure 61; and Figure 62).
29. Referring to claim 22, Gove has taught an article comprising:
- a. A storage medium (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62);

- b. Said storage medium including stored instructions that, when executed by a processor, result in receiving configuration information at a switch, configuring said switch to establish a first set of connections between a plurality of control units and a plurality of data paths to execute a first process using single instruction multiple data processing, and configuring said switch to establish a second set of connections between said control units and said data paths to execute a second process using multiple instruction multiple data processing (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

30. Referring to claim 23, Gove has taught the article of claim 22, wherein the stored instructions, when executed by a processor, further result in said first set of connections connecting at least one of said plurality of control units to multiple data paths, with said one control unit to control said multiple data paths (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

31. Referring to claim 24, Gove has taught the article of claim 22, wherein the stored instructions, when executed by a processor, further result in said second set of connections connecting multiple control units to multiple data paths, with each control unit to control a single data path (Gove column 1, line 47 to column 3, line 20; column 5, lines 20-56; column 6, lines 6-

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43; column 7, lines 5-13; column 8, line 42 to column 9, line 13; column 16, lines 6-17; column 61, line 60 to column 62, line 24; Figure 1; Figure 2; Figure 4; Figure 14; Figure 15; Figure 17; Figure 61; and Figure 62).

### *Conclusion*

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents 5,239,654; 5,371,896; 5,475,856; 5,522,083; 5,524,265; 5,560,030; 5,590,350; 5,600,847; 5,613,146; 5,673,407; 5,701,507; 5,708,836; 5,724,599; 5,768,609; 5,878,241; 6,098,163; 6,260,088; and 6,948,050 have all taught a parallel computing system that switches between SIMD and MIMD modes.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aimee J. Li whose telephone number is (571) 272-4169. The examiner can normally be reached on M-T 7:00am-4:30pm.

34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

35. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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AJL  
Aimee J. Li  
2 May 2006

  
EDDIE CHAN  
SUPERVISORY PATENT EXAMINER  
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